

Abstract

A process of making a fuel or chemical from a biomass hydrolyzate is provided which comprises the steps of providing a biomass hydrolyzate, adjusting the pH of the hydrolyzate, contacting a metal oxide having an affinity for guaiacyl or syringyl functional groups, or both and the hydrolyzate for a time sufficient to form an adsorption complex; removing the complex wherein a sugar fraction is provided, and converting the sugar fraction to fuels or chemicals using a microorganism.